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*(Use as many sheets as necessary)*

Sheet	1	of	2
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Application Number	10/688,416
Filing Date	October 17, 2003
First Named Inventor	David Charles Schwartz
Art Unit	
Examiner Name	
Attorney Docket Number	960296.00129

## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
/SKM V		WO 94/18218	08-18-1994	Seq. Ltd.		
		WO 00/09757	02-24-2000	U.S. Genomics		
		PCT Int'l Search Report				

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/Stephanie Mummert/ (05/29/2007)

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OTHER PRIOR ART–NON PATENT LITERATURE DOCUMENTS			
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/SKM/		Chih-Ming Ho, "Fluidics - The Link Between Micro and Nano Sciences and Technologies", Proceedings of the IEEE 14th Annual International Conference On Microelectro Mechanical Systems. MEMS 2001. Interlaken, Switzerland, Jan 21-25.	
/SKM/		2001, IEEE International Micro Electro Mechanical Systems Conference, New York, NY: IEEE, US, vol. CONF. 14, (01-21-2001), pgs 375-384, XP010534628 ISBN: 0-7803-5998-4, pg 378-379.	
/SKM/		Unger M A Et Al: "Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography", Science, American Association For The Advancement Of Science, US, vol. 288, 04/07/2000, pgs. 113-116, XP002192277 ISSN: 0036-8075 Figure 1.	
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/SKM/		Stikeman, Alexandra, "Nanobiotech Makes The Diagnosis," Technology Review, May 2002, pgs. 61-66.	

Examiner Signature	/Stephanie Mummert/ (05/29/2007)	Date Considered	05/29/2007
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Prior art cited from U.S. Patent No. 6,610,256

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STATEMENT BY APPLICANT**

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Sheet 1 of 7

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/SKM/		US- 4,473,452	Sep., 1984	Cantor et al.	
		US- 4,695,548	Sep., 1987	Cantor et al.	
		US- 4,737,251	Apr., 1988	Carle et al.	
		US- 4,767,700	Aug., 1988	Wallace	
		US- 4,870,004	Sep., 1989	Conroy et al.	
		US- 5,059,294	Oct., 1991	Lizardi	
		US- 5,079,169	Jan., 1992	Chu et al.	
		US- 5,314,829	May, 1994	Coles	
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		US- 5,405,519	Apr., 1995	Schwartz	
		US- 5,599,664	Feb. 1997	Schwartz	
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		US- 5,985,549	Nov., 1999	Singer et al.	435/6
		US- 6,147,198	Nov., 2000	Schwartz	
		US- 6,150,089	Nov., 2000	Schwartz	
		US- 6,294,136	Sep., 2001	Schwartz	422/186
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/SKM/		FR 2605472	Apr., 1988	Alain Bouillet		
		WO 84/02001	May, 1984	Trustees of Columbia Univers		
		WO 87/01955	Sep., 1987	Washington University		

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		First Named Inventor	David Charles Schwartz		
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/SKM/		Allison et al., 1992, "Immobilization of DNA for Scanning Probe Microscopy", Proc. Natl. Acad. Sci. USA 89: 10129-10133.	
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		Application Number	10/668,416
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
		Examiner Name	
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/SKM/		Chumakov et al., 1992, "Continuum of Overlapping Clones Spanning the Entire Human Chromosome 21q", Nature 359: 380-387.	
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		Smith et al., 1989, "Observation of Individual DNA Molecules Undergoing gel Electrophoresis", Science 242:203-206.	
✓		Smith and Blumstiel, 1976, "A Simple Method for DNA Restriction Site Mapping", Nucl. Acids Res. 3:2387-2399.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/688,416
		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
		Examiner Name	
Sheet 7 of 7	Attorney Docket Number	960296.00129	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/SKM/		Southern, 1975, "Detection of Specific Sequences among DNA Fragments Separated by Gel Electrophoresis", J. Mol. Biol. 98:503-517.	
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✓		Zubay, 1988, Biochemistry (Macmillan Publishing Company, New York) pp. 918-919.	

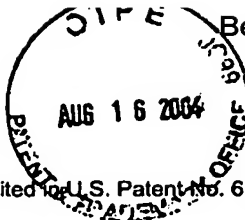
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Filing Date	October 17, 2003
First Named Inventor	David Charles Schwartz
Art Unit	
Examiner Name	
Attorney Docket Number	960296.00129

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 4,473,452	Sep., 1984	Cantor et al.	204/180
		US- 4,695,548	Sep., 1987	Cantor et al.	435/179
		US- 4,737,251	Apr., 1988	Carle et al.	204/182
		US- 4,767,700	Aug., 1988	Wallace	435/6
		US- 4,870,004	Sep., 1989	Conroy et al.	435/6
		US- 5,059,294	Oct., 1991	Lizardi	204/458
		US- 5,079,169	Jan., 1992	Chu et al.	436/174
		US- 5,314,829	May, 1994	Coles	436/165
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		US- 5,720,928	Feb., 1998	Schwartz	422/186
		US- 5,985,549	Nov., 1999	Singer et al.	435/6
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		Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		FR 2605472	Apr., 1988	Alain Bouillet		
		WO 84/02001	May, 1984	Trustees of Columbia University		
		WO 87/01955	Sep., 1987	Washington University		

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Application Number	10/688,416
Filing Date	October 17, 2003
First Named Inventor	David Charles Schwartz
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		Allison et al., 1992, "Immobilization of DNA for Scanning Probe Microscopy", Proc. Natl. Acad. Sci. USA 89: 10129-10133.	
		Barlow and Lehrach, 1987, "Genetics by Gel Electrophoresis: The Impact of Pulsed Field Gel Electrophoresis on Mammalian Genetics", Trends in Genetics 3: 167-171.	
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		Chattoraj et al., 1978, "DNA Coordination with Polyamines", J. Mol. Biol. 121: 327-337.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/668,416
		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
		Examiner Name	
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		Chumakov et al., 1992, "Continuum of Overlapping Clones Spanning the Entire Human Chromosome 21q", Nature 359: 380-387.	
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		Guo et al., 1993, "Sizing of Large DNA Molecules by Hook Formation in a Loose Matrix", J. Biomol. Struct. and Dynam. 11: 1-10.	

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		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
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		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
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		Link and Olson, 1991, "Physical Map of the <i>Saccharomyces cerevisiae</i> Genome at 110-Kilobase Resolution", Genetics 127: 681-698.	
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		Perkins et al., 1994, "Direct Observation of Tube-like Motion of a Single Polymer Chain", Science 264: 819-822.	

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		Poddar and Maniloff, 1986, "Chromosome Analysis by Two-Dimensional Fingerprinting", Gene 49: 93-102.	
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 7 of 8

**Complete if Known**

Application Number	10/668,416
Filing Date	October 17, 2003
First Named Inventor	David Charles Schwartz
Group Art Unit	
Examiner Name	
Attorney Docket Number	960296.00129

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
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		Zubay, 1988, Biochemistry (Macmillan Publishing Company, New York) pp. 918-919.	

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				First Named Inventor	David Charles Schwartz
				Group Art Unit	
				Examiner Name	
				Attorney Docket Number	960296.00129
Sheet	8	of	8		

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Prior Art Cited, in U.S. PATENT NO. 5,720,928

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Attorney Docket Number	960296.00129

Sheet	1	of	9
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## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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		Country Code <sup>2</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
/SKM/		FR 2605472	Apr., 1988	Alain Bouillet		
▼		WO 84/02001	May, 1984	Trustees of Columbia Univers		
		WO 87/01955	Sep., 1987	Washington University		

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		Examiner Name	
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		Attorney Docket Number	960296.00129

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/SKM/		Luckham and Klein, 1984, "Forces between Mica Surfaces Bearing adsorbed Polyelectrolyte, Poly-L-lysine, in Aqueous Media", Chem. Soc. Faraday Trans. I, 80: 865-878.	
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/SKM		Campbell et al., 1991, "Generation of a nested series of interstitial deletions in yeast artificial chromosomes carrying human DNA", Proc. Natl. Acad. Sci. USA 88:5744.	
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/688,416
		Filing Date	October 17, 2003
		First Named Inventor	David Charles Schwartz
		Group Art Unit	
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/SKM/		Yanagida et al., "Dynamic Behaviors of DNA Molecules in Solution...", Cold Sprng. Hrbr. Symp. Quant. Biol. 47, pp. 177-187, 1983.	
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